

# **Exhibit 7**

**CHART FOR U.S. PATENT NO. 9,264,441 (“the ’441 Patent”)**

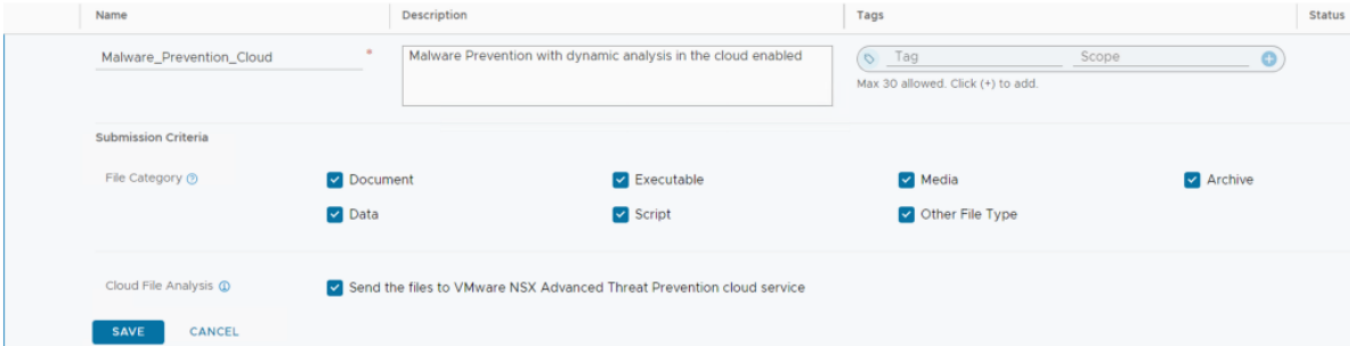
**Accused Products:** VMware’s products, including at least each of the following appliances and software infringe at least Claim 11 of the ’441 Patent: NSX Distributed Firewall with Advanced Threat Prevention, NSX Gateway Firewall with Advanced Threat Prevention, NSX Advanced Threat Prevention (standalone). The infringement chart below is based on the NSX Gateway Firewall with Advanced Threat Prevention (“NSX Advanced Threat Prevention”), which is exemplary of the infringement of the ’441 Patent by all of the Accused Products.

Claims	Exemplary Infringement Evidence
<p>[11pre] A non-transitory machine-readable medium comprising machine readable instructions that when executed by a processor perform a method, the machine readable instructions to cause the processor to:</p>	<p>To the extent the preamble is limiting, the Accused Products compris a non-transitory machine-readable medium comprising machine readable instructions that when executed by a processor perform a method, the machine readable instructions to cause the processor to perform the recited functions.</p> <p>To the extent the preamble is deemed limiting, NSX Advanced Threat Prevention comprises non-transitory machine-readable medium comprising machine readable instructions that when executed by a processor perform a method, the machine readable instructions to cause the processor to perform the recited functions.</p> <p><b>The VMware Approach to Preventing Advanced Threats</b></p> <p>VMware has taken an automated, distributed and enterprise-wide approach to preventing advanced threats. The solution, the VMware Advanced Threat Prevention (ATP) package, is an add-on to the VMware NSX Distributed Firewall [2]. ATP provides protection against advanced threats. It increases fidelity, reduces false positives, and accelerates remediation while simultaneously reducing the amount of manual work that analysts must do.</p> <p>See Advanced Threat Prevention with VMware NSX Distributed Firewall available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf</a> at p. 2</p>

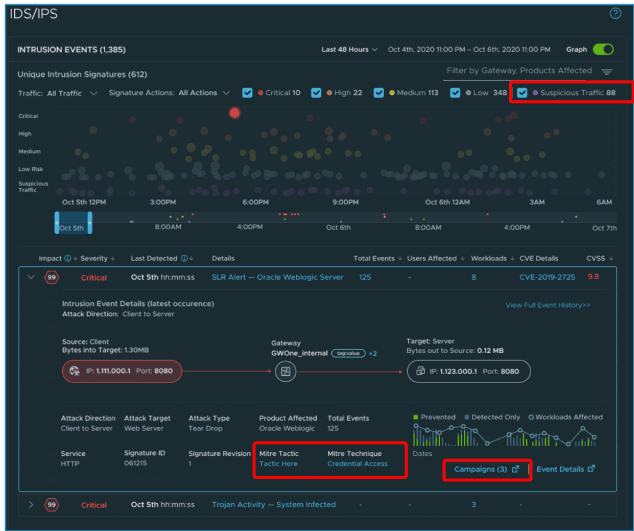
Claims	Exemplary Infringement Evidence
	<p>VMware's ATP incorporates multiple detection technologies and includes logic that combines information from all these (see Figure 1):</p> <ul style="list-style-type: none"> <li>• Detection technologies <ul style="list-style-type: none"> <li>– Distributed IDS/IPS</li> <li>– Network sandbox</li> <li>– Network traffic analysis (NTA)</li> </ul> </li> <li>• Network detection and response (NDR) <ul style="list-style-type: none"> <li>– Aggregation, correlation, and context engines</li> <li>– Including the ability to pull context from sources outside NSX</li> </ul> </li> </ul> <div data-bbox="472 812 1732 1242" data-label="Diagram"> </div> <p><b>Figure 1:</b> ATP—multiple detection technologies + NDR</p> <p>See Advanced Threat Prevention with VMware NSX Distributed Firewall available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf</a> at p. 3</p>

Claims	Exemplary Infringement Evidence
	<p><b>Network sandbox</b> is a secure isolation environment that is designed to detect malicious artifacts in the data center. It analyzes the behavior of objects, such as files and URLs, to determine if they are benign or malicious. Because it is not reliant on signatures, the sandbox can detect novel and highly targeted malware that has never been seen before. VMware chose the most advanced method of sandboxing available: Full-system Emulation (FUSE)-based sandboxing [4].</p> <p>See Advanced Threat Prevention with VMware NSX Distributed Firewall available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf</a> at p. 3</p> <p>VMware's sandbox implementation uses VMware Deep Content Inspection™, a unique isolation and inspection environment that simulates an entire host (including the CPU, system memory, and all devices), to analyze malware. The sandbox continuously observes all the actions that a malicious object takes.</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>

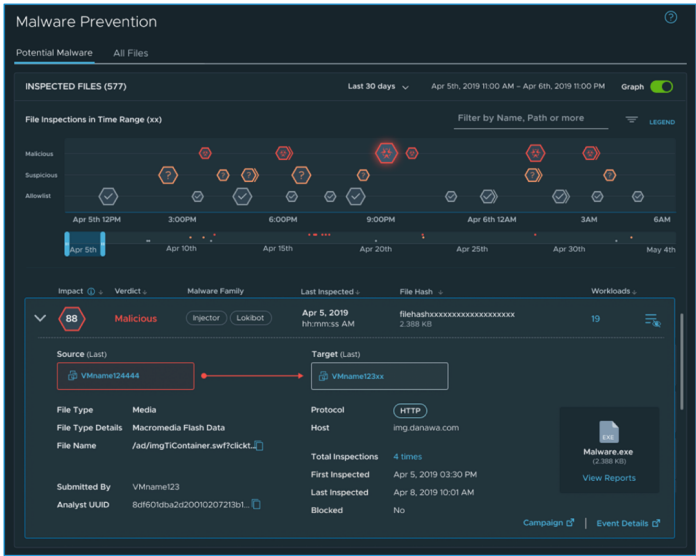
Claims	Exemplary Infringement Evidence
	<p>Network Detection and Response is available across all three products in the NSX Security portfolio –</p> <ul style="list-style-type: none"> <li>• <b>NSX Distributed Firewall with Advanced Threat Prevention.</b> In this configuration, Network Detection and Response processes signals available across east-west network traffic and alerts security teams to potential lateral movement of threats.</li> <li>• <b>NSX Gateway Firewall with Advanced Threat Prevention.</b> In this configuration, Network Detection and Response processes traffic coming into or out of an environment and alerts security teams to infiltration and exfiltration attempts. VMware’s Network Detection and Response implementation processes signals across both the Distributed and Gateway Firewall when these firewalls are deployed together.</li> <li>• <b>NSX Advanced Threat Prevention (standalone).</b> In this configuration, Network Detection and Response is deployed in an environment to protect non-vSphere workloads. Typically, neither the NSX Distributed Firewall nor the NSX Gateway Firewall is available in such environments. However, the Network Detection and Response functionality is similar to the other two configurations mentioned above.</li> </ul> <p>See Network Detection and Response available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-nsx-ndr-so.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-nsx-ndr-so.pdf</a> at p. 2.</p>
[11a] receive a plurality of packets destined for an internal operating system;	<p>The Accused Products comprise machine readable instructions that cause the processor to receive a plurality of packets destined for an internal operating system.</p> <p>For example, NSX Advanced Threat Prevention receives a plurality of packets destined for an internal operating system.</p>

Claims	Exemplary Infringement Evidence
	<div data-bbox="451 280 1793 623">  </div> <p data-bbox="436 630 1045 662"><i>See</i> VMware NSX Advanced Threat Prevention</p> <p data-bbox="436 711 1766 768">NSX Malware Prevention can detect and prevent known malicious files and unknown malicious files. Unknown malicious files are also referred to as zero-day threats. To detect malware, NSX Malware Prevention uses a combination of the following techniques :</p> <ul data-bbox="478 784 919 898" style="list-style-type: none"> <li>• Hash-based detection of known malicious files</li> <li>• Local analysis of unknown files</li> <li>• Cloud analysis of unknown files</li> </ul> <p data-bbox="436 914 1879 987"><i>See</i> <a href="https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-69DF70C2-1769-4858-97E7-B757CAED08F0.html">https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-69DF70C2-1769-4858-97E7-B757CAED08F0.html</a></p>

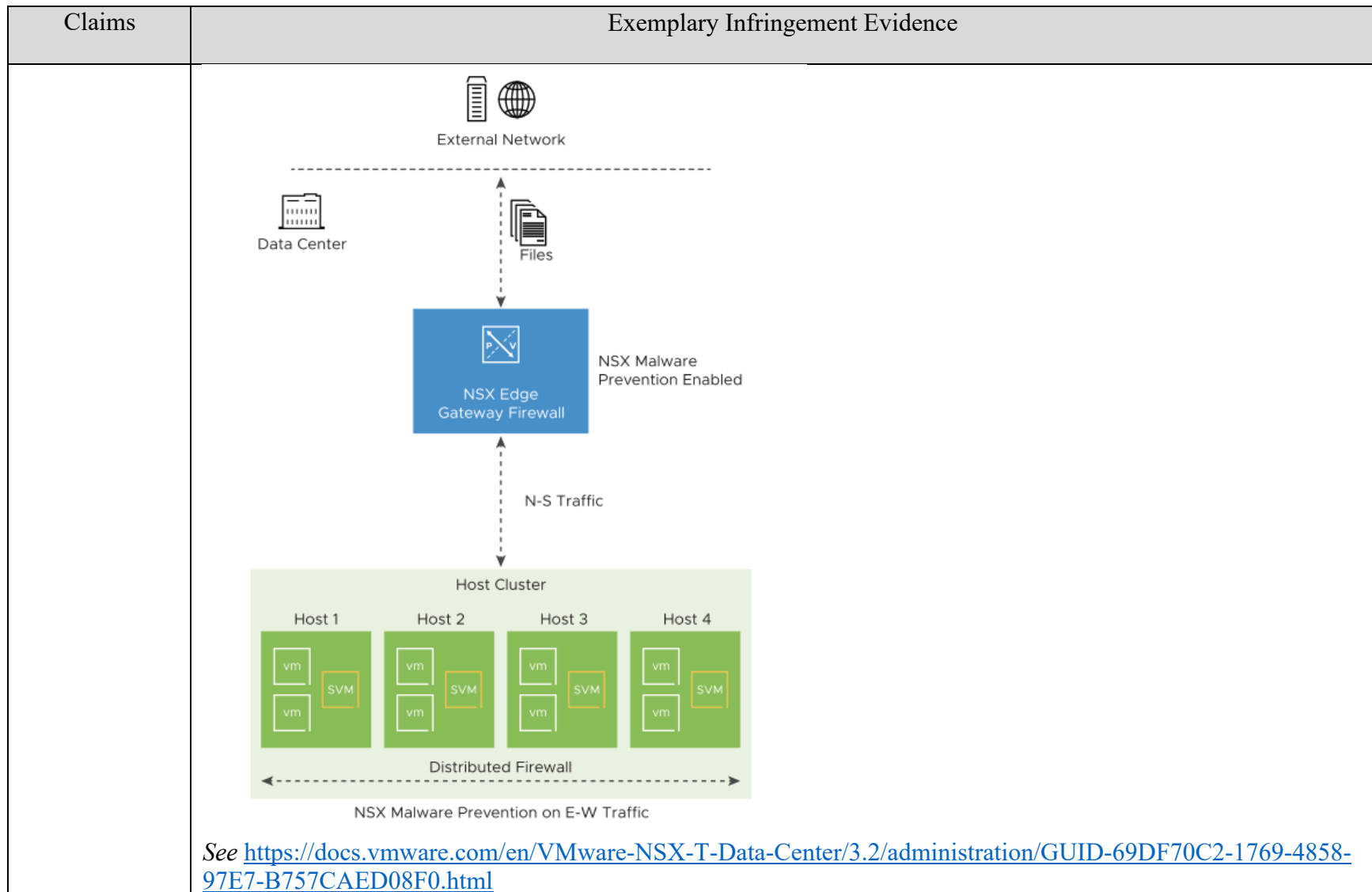
Claims	Exemplary Infringement Evidence
	<p><b>Cloud File Analysis</b></p> <p>Cloud file analysis is done by the NSX Advanced Threat Prevention service that is running in the cloud. It involves a detailed analysis of unknown files by using the following techniques to detect whether the file is benign, malicious, or suspicious:</p> <ul style="list-style-type: none"> <li>• NSX Malware Prevention sandboxing and behavioral analysis</li> <li>• Statistical algorithms</li> <li>• Artificial intelligence and machine learning</li> <li>• Deep content inspection</li> </ul> <p>NSX-T sends unknown files over a secure connection to the cloud only when you opt for cloud file analysis in your Malware Prevention security profile.</p> <p><b>File Event</b></p> <p>An event that is generated when a file is extracted or intercepted from the data path traffic on an NSX Edge or a Guest VM on the host. On an NSX Edge, the file is extracted by the NSX IDPS engine, and on a Guest VM, the file is extracted by the NSX File Introspection driver in the Guest Introspection (GI) thin agent.</p> <p>See <a href="https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-BCC842E4-936A-49EE-B64E-CD90E915115D.html">https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-BCC842E4-936A-49EE-B64E-CD90E915115D.html</a></p> <p>NSX Distributed IDS/IPS is an application-aware traffic inspection engine purpose built for analyzing internal East-West traffic and detecting lateral threat movements. The engine runs within the hypervisor to optimize packet inspection. NSX Distributed IDS/IPS combines industry-leading signature sets, protocol decoders and anomaly detection-based mechanisms to hunt for known and unknown attacks in the traffic flow. It also benefits from rich application context, driving lower false positive rates while incurring minimal computational overhead on the host.</p> <p>See <a href="https://nsx.techzone.vmware.com/resource/nsx-security-reference-design-guide#a-21-nsx-security-use-cases">https://nsx.techzone.vmware.com/resource/nsx-security-reference-design-guide#a-21-nsx-security-use-cases</a></p>

Claims	Exemplary Infringement Evidence
	<p>A network sandbox intercepts artifacts entering and traversing the network.. The sandbox appears to the potential malware to be a fully-functioning end-user environment, and it coaxes suspicious files into running their routines — executing, downloading other files, connecting to URLs, etc. The sandbox analyzes a suspect file's and network behavior, and either allows the file to continue into the network, blocks it, or quarantines it for further investigation.</p> <p>Network sandboxes are ideally combined with an advanced threat protection solution to round out detection and response capabilities.</p> <p>See <a href="https://www.vmware.com/topics/glossary/content/network-sandbox.html">https://www.vmware.com/topics/glossary/content/network-sandbox.html</a></p>  <p>The screenshot displays the VMware NSX IDS/IPS interface. At the top, it shows 'INTRUSION EVENTS (1,385)' with a time range of 'Last 48 Hours' and a 'Graph' toggle. Below this, there are filters for 'Traffic: All Traffic', 'Signature Actions: All Actions', and 'Filter by Gateway, Products Affected'. A red box highlights the 'Suspected Traffic: 88' filter. The main area shows a timeline of intrusion events with various risk levels (Critical, High, Medium, Low Risk, Suspicious Traffic). Below the timeline, a detailed view of a specific event is shown, including 'Intrusion Event Details (latest occurrence)', 'Attack Direction: Client to Server', 'Source: Client Bytes into Target: 1.20MB', 'Target: Server Bytes out to Source: 0.12 MB', and 'Attack Type: Teardrop'. A red box highlights the 'Mitre Technique: Credential Access' field. At the bottom, there are links for 'Campaigns (3)' and 'Event Details'.</p> <p><b>Behavioral IDPS</b></p> <p>Identify anomalous/unusual behavior that could be related to a breach.</p> <p>Augments signature-based IDPS with informational events</p> <p>Not related to a specific exploit/threat</p> <p>Implemented via signatures and LUA scripts</p> <p>Examples</p> <ul style="list-style-type: none"> <li>• Periodic call-back behavior (C2 check-in)</li> <li>• High failure rate in authentication (enumeration attempt)</li> <li>• Port Scans/sweeps</li> <li>• Tunneling over anonymous proxies</li> <li>• Remote Task Scheduling</li> </ul> <p>IDPS Events are mapped to Mitre and to a campaign if relevant (via NDR)</p> <p>vmware®</p> <p>See NSX The Platform for Security available at <a href="https://www.vmware.com/content/dam/learn/en/emea/fy23/pdf/1245207_04-05-2022_NSX-Security-Platform.pdf">https://www.vmware.com/content/dam/learn/en/emea/fy23/pdf/1245207_04-05-2022_NSX-Security-Platform.pdf</a> at p. 5</p>



Claims	Exemplary Infringement Evidence
	<div data-bbox="480 342 1171 894">The screenshot displays the VMware Malware Prevention dashboard. At the top, it shows 'INSPECTED FILES (577)' and a time range filter set to 'Last 30 days'. Below this is a timeline visualization of file inspections from April 5th to May 4th, 2019, with icons indicating Malicious, Suspicious, and Allowed status. The bottom section provides a detailed view of a specific file inspection. It identifies the file as 'Malicious' (Lokibot) with a file hash of 'f1efashxxxxxxxxxxxxxxxxxxxx'. The source is 'VMName12444' and the target is 'VMName123x'. The file type is 'Media' and the details include 'Macromedia Flash Data'. The file name is '/ad/img/Container.swfclickt...'. The inspection was submitted by 'VMName123' and analyzed by 'Analyst UUID: 8d9601bda320010207213b1...'. The file was first inspected on April 5, 2019, at 03:30 PM, last inspected on April 8, 2019, at 10:01 AM, and was not blocked. A 'Malware.exe' file (2,388 KB) is also shown with a 'View Reports' link.</div> <p data-bbox="1383 354 1612 378"><b>Malware Prevention</b></p> <p data-bbox="1383 401 1764 448">Malware detection and Prevention for DFW (E-W)</p> <p data-bbox="1383 470 1726 495">Malware detection for GFW (N-S)</p> <p data-bbox="1383 516 1799 540">Known Malicious files and new Zero-days</p> <p data-bbox="1383 561 1772 609">Local (static) analysis and cloud-based dynamic analysis (sandbox detonation)</p> <p data-bbox="1383 630 1803 677">Guest-Introspection-based File extraction for DFW</p> <p data-bbox="1383 698 1740 722">IDPS based File extraction for GFW</p> <p data-bbox="1383 743 1734 790">Events logged locally and linked to Campaign via NDR</p> <p data-bbox="441 915 588 946"><b>vmware</b></p> <p data-bbox="434 969 1894 1075">See NSX The Platform for Security available at <a href="https://www.vmware.com/content/dam/learn/en/emea/fy23/pdf/1245207_04-05-2022_NSX-Security-Platform.pdf">https://www.vmware.com/content/dam/learn/en/emea/fy23/pdf/1245207_04-05-2022_NSX-Security-Platform.pdf</a> at p. 6</p> <p data-bbox="464 1118 1829 1315">VMware’s sandbox implementation uses VMware Deep Content Inspection<sup>™</sup>, a unique isolation and inspection environment that simulates an entire host (including the CPU, system memory, and all devices), to analyze malware. The sandbox continuously observes all the actions that a malicious object takes.</p>

Claims	Exemplary Infringement Evidence
	<p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>
[11b] store the plurality of packets in a buffer;	<p>The Accused Products comprise machine readable instructions that cause the processor to store the plurality of packets in a buffer.</p> <p>For example, NSX Advanced Threat Prevention stores the plurality of packets in a buffer.</p>

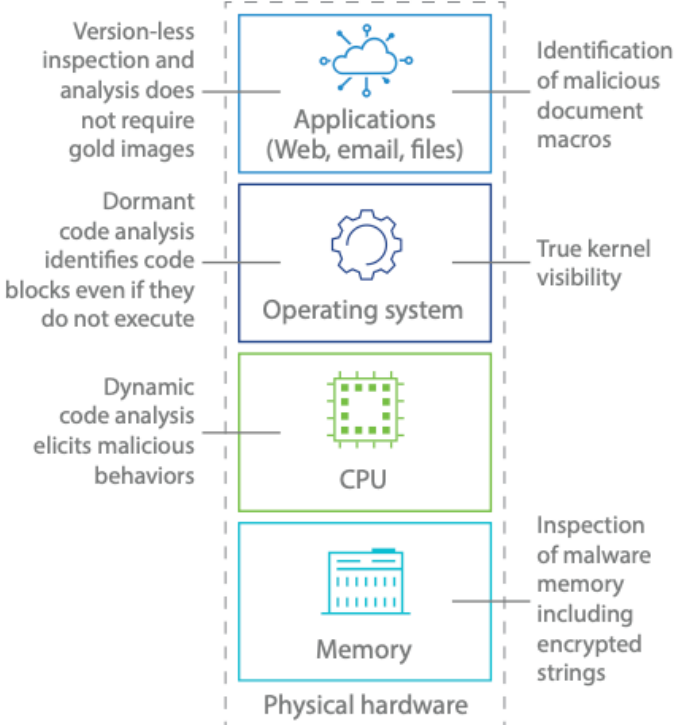


Claims	Exemplary Infringement Evidence
	<p>On the north-south traffic, the NSX Malware Prevention feature uses the IDS/IPS engine on the NSX Edges to extract or intercept the files that are entering the data center. On the east-west traffic, this feature uses the capabilities of the NSX Guest Introspection (GI) platform. If the file bypasses scrutiny on the NSX Edge and reaches the host, the file is extracted by the GI thin agent on Windows guest VMs.</p> <p>To detect and prevent malware on Windows guest VMs, you must install the NSX Guest Introspection thin agent on Windows guest VMs, and deploy the NSX Distributed Malware Prevention service on vSphere host clusters that are prepared for NSX-T Data Center. When this service is deployed, a service virtual machine (SVM) is installed on each host of the vSphere cluster and NSX Malware Prevention is enabled on the host cluster.</p> <p>See <a href="https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-69DF70C2-1769-4858-97E7-B757CAED08F0.html">https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-69DF70C2-1769-4858-97E7-B757CAED08F0.html</a></p> <p>File events are generated when files are extracted by the IDS engine on the NSX Edges in the north-south traffic and by the NSX Guest Introspection agent on the virtual machine endpoints in the distributed east-west traffic.</p> <p>NSX Malware Prevention feature inspects the extracted files to determine whether they are benign, malicious, or suspicious. Each unique inspection of a file is counted as a single file event in NSX-T Data Center. In other words, a file event refers to a unique file inspection.</p> <p>For information about monitoring the NSX Malware Prevention file events by using the UI, see <a href="#">Monitoring File Events</a>.</p> <p>See <a href="https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-69DF70C2-1769-4858-97E7-B757CAED08F0.html">https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-69DF70C2-1769-4858-97E7-B757CAED08F0.html</a></p> <h3>File Event</h3> <p>An event that is generated when a file is extracted or intercepted from the data path traffic on an NSX Edge or a Guest VM on the host. On an NSX Edge, the file is extracted by the NSX IDPS engine, and on a Guest VM, the file is extracted by the NSX File Introspection driver in the Guest Introspection (GI) thin agent.</p> <p>See <a href="https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-BCC842E4-936A-49EE-B64E-CD90E915115D.html">https://docs.vmware.com/en/VMware-NSX-T-Data-Center/3.2/administration/GUID-BCC842E4-936A-49EE-B64E-CD90E915115D.html</a></p>

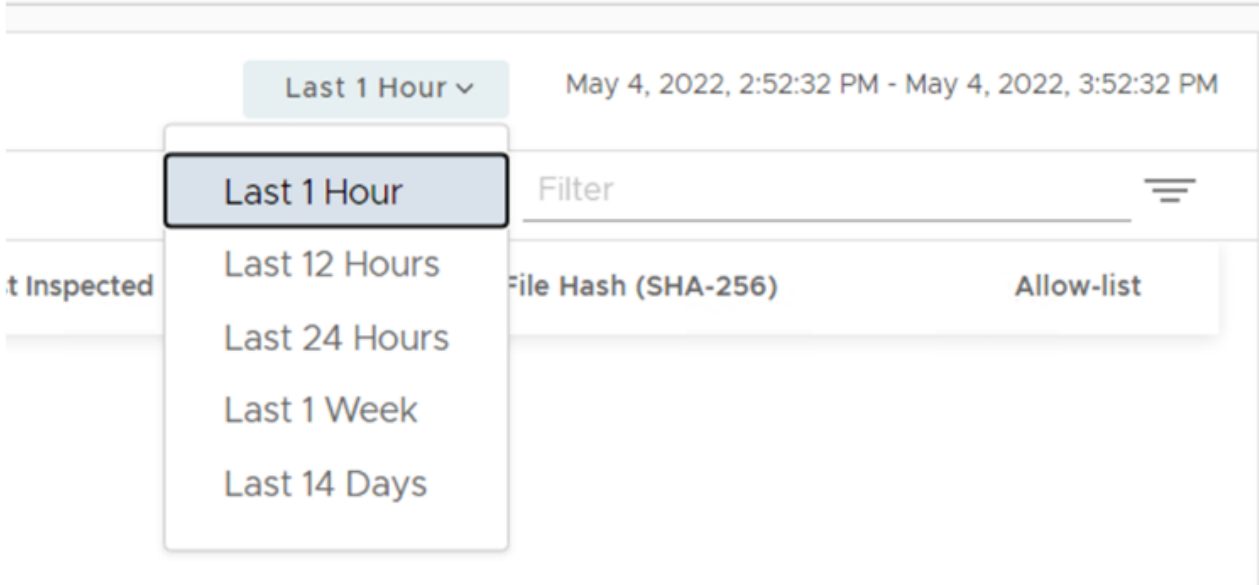
Claims	Exemplary Infringement Evidence
<p>[11c] forward a copy of each packet of said plurality of packets to a virtual machine emulating said internal operating system;</p>	<p>The Accused Products comprise machine readable instructions that cause the processor to forward a copy of each packet of said plurality of packets to a virtual machine emulating said internal operating system.</p> <p>For example, NSX Advanced Threat Prevention forwards a copy of each packet of said plurality of packets to a virtual machine emulating said internal operating system.</p> <div data-bbox="476 487 1159 1037"> </div> <p>vmware</p> <p>See NSX The Platform for Security available at <a href="https://www.vmware.com/content/dam/learn/en/emea/fy23/pdf/1245207_04-05-2022_NSX-Security-Platform.pdf">https://www.vmware.com/content/dam/learn/en/emea/fy23/pdf/1245207_04-05-2022_NSX-Security-Platform.pdf</a> at p. 6</p> <div data-bbox="1365 495 1806 933"> <p><b>Malware Prevention</b></p> <p>Malware detection and Prevention for DFW (E-W)</p> <p>Malware detection for GFW (N-S)</p> <p>Known Malicious files and new Zero-days</p> <p>Local (static) analysis and cloud-based dynamic analysis (sandbox detonation)</p> <p>Guest-Introspection-based File extraction for DFW</p> <p>IDPS based File extraction for GFW</p> <p>Events logged locally and linked to Campaign via NDR</p> </div>

Claims	Exemplary Infringement Evidence
	<p>The Engine uses Deep Content Inspection, a unique isolation and inspection environment (sandbox) that simulates an entire host (including the CPU, system memory, and all peripherals) and its operating environment to analyze potentially malicious files. Unknown files, such as applications and documents, and URLs, are submitted from the Manager and other sources. The Engine runs these artifacts in its sandbox and returns the results of its analysis to the Manager, which then displays results.</p> <p>See Engine Installation and Administration available at <a href="https://docs.vmware.com/en/VMware-NSX-Network-Detection-and-Response/9.7/Engine_Installation_Manual_9.7.pdf">https://docs.vmware.com/en/VMware-NSX-Network-Detection-and-Response/9.7/Engine_Installation_Manual_9.7.pdf</a> at p. 1</p> <p>With a network sandbox, security teams can carry out advanced malware analysis by allowing suspicious files to run in a segregated environment that emulates an actual end-user operating environment.</p> <p>See <a href="https://www.vmware.com/topics/glossary/content/network-sandbox.html">https://www.vmware.com/topics/glossary/content/network-sandbox.html</a></p> <p>VMware's sandbox implementation uses VMware Deep Content Inspection™, a unique isolation and inspection environment that simulates an entire host (including the CPU, system memory, and all devices), to analyze malware.</p> <p>The sandbox continuously observes all the actions that a malicious object takes.</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>
[11d] monitor performance of said virtual machine in processing the forwarded packets;	<p>The Accused Products comprise machine readable instructions that cause the processor to monitor performance of said virtual machine in processing the forwarded packets.</p> <p>For example, NSX Advanced Threat Prevention monitors performance of said virtual machine in processing the forwarded packets.</p>

Claims	Exemplary Infringement Evidence
	<p>Further, the sandbox interacts with the malware to elicit every malicious behavior, including identifying dormant code and documenting all CPU instructions executed. Finally, the sandbox identifies the memory (RAM) locations accessed by the artifact being analyzed.</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>

Claims	Exemplary Infringement Evidence
	 <p><b>Figure 2: VMware Deep Content Inspection delivers unmatched visibility</b></p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 2</p>
[11e] delete a packet of the plurality of packets from the buffer upon	The Accused Products comprise machine readable instructions that cause the processor to delete a packet of the plurality of packets from the buffer upon a determination that said packet was stored in the buffer for a predetermined time period.



Claims	Exemplary Infringement Evidence
<p>a determination that said packet was stored in the buffer for a predetermined time period;</p>	<p>For example, NSX Advanced Threat Prevention deletes a packet of the plurality of packets from the buffer upon a determination that said packet was stored in the buffer for a predetermined time period.</p>  <p><i>See NSX Malware Prevention Dashboard</i></p> <p>You can monitor events and view data of the last 14 days.</p> <p>To view intrusion events, navigate to <b>Security &gt; IDS/IPS</b> . You can filter the events based on the following criteria:</p> <p><i>See <a href="https://docs.vmware.com/en/VMware-NSX/4.1/administration/GUID-852AADD3-653F-4C1C-A10E-24D03B4084CA.html">https://docs.vmware.com/en/VMware-NSX/4.1/administration/GUID-852AADD3-653F-4C1C-A10E-24D03B4084CA.html</a></i></p>

Claims	Exemplary Infringement Evidence
<p>[11f] detect a failure of said virtual machine; and</p>	<p>The Accused Products comprise machine readable instructions that cause the processor to detect a failure of said virtual machine.</p> <p>For example, NSX Advanced Threat Prevention detects a failure of said virtual machine.</p> <p>Further, the sandbox interacts with the malware to elicit every malicious behavior, including identifying dormant code and documenting all CPU instructions executed. Finally, the sandbox identifies the memory (RAM) locations accessed by the artifact being analyzed.</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p> <p>Full system emulation (FUSE) sandboxes emulate the entire hardware: CPU, memory, and I/O devices. The advantages are clear: it allows the sandbox to interact with the malware and conduct deep content inspection. This enables the sandbox to view everything the malware is doing, and lets analysts carefully study the malware and its operation. Because it emulates everything, it is much more difficult for cybercriminals to evade the sandbox.</p> <p>See Advanced Threat Prevention with VMware NSX Distributed Firewall available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-advanced-threat-prevention-with-nsx-distributed-firewall.pdf</a> at p. 4</p>
<p>[11g] analyze said packets in said buffer and identify said malicious packet from said buffer</p>	<p>The Accused Products comprise machine readable instructions that cause the processor to analyze said packets in said buffer and identify said malicious packet from said buffer packets in response to detecting the failure of said virtual machine.</p> <p>For example, NSX Advanced Threat Prevention analyzes said packets in said buffer and identify said malicious packet from said buffer packets in response to detecting the failure of said virtual machine.</p>

Claims	Exemplary Infringement Evidence
packets in response to detecting the failure of said virtual machine; and	<p data-bbox="447 326 1619 516">Further, the sandbox interacts with the malware to elicit every malicious behavior, including identifying dormant code and documenting all CPU instructions executed. Finally, the sandbox identifies the memory (RAM) locations accessed by the artifact being analyzed.</p> <p data-bbox="436 532 1892 634"><i>See</i> Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>

Claims	Exemplary Infringement Evidence
	<div data-bbox="451 284 1123 998"> <p>The diagram illustrates four layers of inspection within a dashed box labeled 'Physical hardware' at the bottom. From top to bottom: 1. 'Applications (Web, email, files)' with a cloud icon, linked to 'Version-less inspection and analysis does not require gold images' on the left and 'Identification of malicious document macros' on the right. 2. 'Operating system' with a gear icon, linked to 'Dormant code analysis identifies code blocks even if they do not execute' on the left and 'True kernel visibility' on the right. 3. 'CPU' with a chip icon, linked to 'Dynamic code analysis elicits malicious behaviors' on the left. 4. 'Memory' with a server rack icon, linked to 'Inspection of malware memory including encrypted strings' on the right.</p> </div> <p><b>Figure 2: VMware Deep Content Inspection delivers unmatched visibility</b></p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 2</p>

Claims	Exemplary Infringement Evidence
	<p><b>At a Glance</b></p> <p>VMware's Network Sandbox provides advanced malware analysis of artifacts traversing your cloud environment. The sandbox deconstructs every behavior engineered into a file or URL and sees all instructions that a program executes, all memory content, and all operating system activity.</p> <p>At VMware, Network Sandboxing is a component of NSX Advanced Threat Prevention along with Intrusion Detection/Prevention System (IDS/IPS), Network Traffic Analysis (NTA), and Network Detection and Response (NDR).</p> <div data-bbox="945 284 1375 641"> <pre> graph TD     NTA[NTA] --&gt; NDR[NDR]     NDR --&gt; NS[Network Sandbox]     NS --&gt; IDS[IDS/IPS]     IDS --&gt; NTA </pre> </div> <p><b>Figure 1:</b> NSX Advanced Threat Prevention = IDS/IPS + Network Sandbox + NTA + NDR</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p> <p>Further, the sandbox interacts with the malware to elicit every malicious behavior, including identifying dormant code and documenting all CPU instructions executed. Finally, the sandbox identifies the memory (RAM) locations accessed by the artifact being analyzed.</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>

Claims	Exemplary Infringement Evidence
	<p>The sandbox's analysis of malicious artifacts provides you with the threat information you need for security workflows and policies. You receive both high-level, actionable threat intelligence and detailed host and network indicators of compromise (IoCs).</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>
<p>[11h] create a malicious packet signature based upon the identified malicious packet.</p>	<p>The Accused Products comprise machine readable instructions that cause the processor to create a malicious packet signature based upon the identified malicious packet.</p> <p>For example, NSX Advanced Threat Prevention creates a malicious packet signature based upon the identified malicious packet.</p> <p>The sandbox's analysis of malicious artifacts provides you with the threat information you need for security workflows and policies. You receive both high-level, actionable threat intelligence and detailed host and network indicators of compromise (IoCs).</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 1</p>

Claims	Exemplary Infringement Evidence
	<p>The VMware Threat Analysis Unit™ automatically shares the malware characteristics, behaviors, and associated IoCs of every malicious object curated and analyzed by VMware with all VMware customers and partners.</p> <p>This allows for faster detection and analysis of previously unseen threats and reduces the time for you to respond to malicious activity. The sandbox also continuously updates the VMware Threat Analysis Unit in real time with intelligence from partner and customer environments worldwide.</p> <p>In addition, your threat analysts and incident response team can also subscribe to the VMware Threat Analysis Unit NSX knowledge base for faster response to previously known threats. The knowledge base contains the malware characteristics, behaviors, and associated IoCs of every malicious object curated and analyzed by the NSX team.</p> <p>See Network Sandbox available at <a href="https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf">https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmw-nsx-sandbox-solution.pdf</a> at p. 2</p>